IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier

versions and listings.

1.   (currently amended) A router for a __mobile__ radio network that

includes a plurality of routers, said router comprising:

a memory storing a routing table;

a receiver for receiving link state information from the __mobile__

network; and

a processor for (i) __determining__, responsive to the received link state

information forwarded to the router, __a status of connections in the mobile__ network,

(ii) __generating network topology information__ based on the determined connection status

information, (iii) placing the generated network topology information in said __routing table__,

and (iv) transmitting the network topology information in the routing table to at least one

other router in the __mobile__ network.

2.   (currently amended) A router according to Claim 1, wherein the

processor transmits the network topology information to the at least one other router in the

__mobile__ network at a predetermined cycle.

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3.   (original) A router according to Claim 1, further comprising a

transmitter for transmitting a message including the network topology information

retrieved from said routing table.

4.   (currently amended) A method of distributing network topology

information in a mobile radio network that includes a plurality of routers comprising the

steps of:

receiving link state information of the mobile network that is

forwarded to each router in the mobile network;

determining connections of devices in the mobile network in the

receiving router responsive to the received link state information forwarded to the

receiving router;

collecting the determined device connection information to generate

network topology information in the receiving router;

placing the generated network topology information in a routing

table of the receiving router; and

retrieving the network topology information from the routing table.

5.   (original) A method according to Claim 4, wherein the network

topology information is generated periodically.

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6.   (original) A method according to Claim 4, further comprising the step of transmitting a message by the receiving router including the network topology information retrieved from the routing table.

7.   (currently amended) A method according to Claim 4, wherein the link state information is transmitted to the plurality of routers in the mobile network at predetermined times.

8.   (currently amended) A method according to Claim 4, wherein the link state information is forwarded to the plurality of routers in the mobile network periodically.

9.   (currently amended) A routing system in a mobile radio network having plural routers, comprising:

a plurality of routers in the mobile network each including:

a receiver for receiving link state information from the mobile network in a message issued to the plurality of routers; and

a processor in each router, responsive to the received link state information, for (i) determining router connection information in the mobile network, (ii)

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collecting the determined router connection information, (iii) generating network topology

information from the collected router connection information, (iv) storing the generated

network topology information in a routing table, and (v) retrieving the network topology

information in the routing table and forming it into a link state message to be broadcast to

at least one other router in the mobile network.

10.   (original) A routing system according to Claim 9, wherein each

processor periodically generates the network topology information.

11.   (currently amended) A routing system according to Claim 9, further

comprising a transmitter in each router in the mobile network for transmitting the link state

message including the network topology information retrieved from the routing table.

12.   (currently amended) A routing system according to Claim 11,

wherein the transmitter transmits the link state information message to a plurality of routers

in the mobile network at predetermined times.

13.   (currently amended) A routing system according to Claim 11,

wherein the transmitter periodically broadcasts the link state information message to the

plurality of routers in the mobile network.

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14.   (currently amended) A routing system according to Claim 9, wherein

the transmitter transmits the link state information message to the plurality of routers in the

mobile network after its corresponding receiver receives the link state information from the

mobile network.

15.   (currently amended) Computer executable software code stored on a

computer readable medium, the code for distributing network topology information in a

mobile radio network that includes a plurality of routers, the code comprising:

        code for receiving link state information of the mobile network that

is forwarded to each router in the mobile network;

        code for determining connections of devices in the mobile network

in the receiving router responsive to the received link state information forwarded to the

receiving router;

        code for collecting the determined device connection information to

generate network topology information in the receiving router;

        code for placing the generated network topology information in a

routing table of the receiving router; and

        code for retrieving the network topology information from the

routing table.

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16.   (currently amended) A router for a mobile network radio network

that includes a plurality of other routers, said router comprising:

      means for storing a routing table;

      means for receiving link state information from the mobile network;

      means, responsive to the received link state information forwarded

to the router, for determining a status of connections in the mobile network;

      means for generating network topology information based on the

determined connection status information;

      means for placing the generated network topology information in

said routing table; and

      means for transmitting the network topology information in the

routing table to at least one other router in the mobile network.

17.   (currently amended) A routing system in a mobile radio network

having plural routers, comprising a plurality of routers, each router including:

      means for receiving link state information from the mobile network

in a message issued to the plurality of routers in the mobile network;

      means for determining router connection information in the mobile

network;

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means for collecting the determined router connection information;

means for generating network topology information from the

collected router connection information;

means for storing the generated network topology information in a

routing table; and

means for retrieving the network topology information in the routing

table and forming it into a link state message to be broadcast to at least one other router in

the mobile network.

18.   (currently amended) A router according to Claim 1, wherein said

processor also, upon determining, responsive to the received link state information, that no

other router in the mobile network is currently accessible, performs control processing to

determine how often and when to attempt to gather and information relating to the network

topology.

19.   (currently amended) A method according to Claim 4, further

comprising the step of, upon determining in said determining step that no other router in

the mobile network is currently accessible, performing control processing to determine

how often and when to attempt to gather and information relating to the network topology.

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20.   (currently amended) A routing system according to Claim 9,

wherein each said processor also, upon determining, responsive to the received link state

information, that no other router in the mobile network is currently accessible, performs

control processing to determine how often and when to attempt to gather and information

relating to the network topology.